

CLAIMS

What is claimed is:

1. An antenna assembly comprising:
an antenna/radio interface;
a body section connected to the antenna/radio interface; and
a group of omnidirectional radiating elements connected to the body section and surrounding a directional radiating element assembly, the group of omnidirectional radiating elements having a first position within the body section for an omnidirectional mode of the antenna assembly and a second position within the body section for a directional mode of the antenna assembly.
2. The antenna assembly according to claim 1, further comprising a switch for selecting between one of the omnidirectional mode and the directional mode of the antenna assembly.
3. The antenna assembly according to claim 1, wherein the body section includes:
a switch for selecting between one of the omnidirectional mode and the directional mode of the antenna assembly; and
at least one matching circuit.
4. The body section according to claim 3, further comprising an amplifier.
5. The antenna assembly according to claim 1, further comprising the omnidirectional radiating elements being arranged perpendicular to a directional transmission axis of the antenna and serving as a reflector for the directional radiating element assembly when in the directional mode.
6. The antenna assembly according to claim 1, further comprising the antenna/radio interface being a coaxial cable connector.
7. The antenna assembly according to claim 1, wherein the directional radiating element assembly includes an elongated section having a first end and a second end with the first end

connected to the body section of the antenna assembly and the second end having two radiators.

8. The antenna assembly according to claim 7, further comprising the directional mode being an electrical connection between the directional radiating element assembly and the antenna/radio interface.
9. The antenna assembly according to claim 7, further comprising the two radiators being a first radiator having a first dimension and a second radiator having a second dimension, defining a plane perpendicular to the transmission axis when the antenna assembly is in the directional mode.
10. The antenna assembly according to claim 7, further comprising the two radiators being parallel with a directional transmission axis of the antenna when the antenna assembly is in the omnidirectional mode.
11. The antenna assembly according to claim 7, further comprising the two radiators having an adjustable length.
12. The antenna assembly according to claim 1, further comprising the omnidirectional mode being an electrical connection between the group of omnidirectional radiating elements and the antenna/radio interface.
13. The antenna assembly according to claim 1, further comprising the group of omnidirectional radiating elements includes at least two elements.
14. The antenna assembly according the claim 13, further comprising the group of omnidirectional radiating elements having an adjustable length.
15. A dual-band antenna comprising at least one omnidirectional radiating element and a directional radiating element located on a body section, with the directional radiating element

having at least two radiators and the body section having positions for deploying and storing reflectors for the directional radiating element.

16. The dual-band antenna according to claim 15, further comprising the at least one omnidirectional radiating element having a first position within the body section for an omnidirectional mode of the antenna and a second position within the body section for a directional mode of the antenna.

17. The dual-band antenna according to claim 16, wherein the omnidirectional mode is an electrical connection between the at least one omnidirectional radiating element and an input/output interface and the directional mode is an electrical connection between the directional radiating element and an input/output interface.

18. The dual-band antenna according to claim 15, further comprising the radiators being arranged perpendicular to a directional transmission axis for a directional mode of the antenna and parallel to a directional transmission axis for an omnidirectional mode of the antenna.

19. The dual-band antenna according to claim 18, wherein the omnidirectional mode is an electrical connection between the at least one omnidirectional radiating element and an input/output interface and the directional mode is an electrical connection between the directional radiating element and an input/output interface.

20. The dual-band antenna according to claim 15, further comprising the at least one omnidirectional radiating element being arranged perpendicular to a directional transmission axis and serving as a reflector for the directional radiating element when the antenna assembly is in a directional mode.

21. The dual-band antenna according to claim 20, wherein the directional mode is an electrical connection between the directional radiating element and an input/output interface.

22. The dual-band antenna according to claim 15, further comprising the body section including at least one matching circuit and a switch.

23. The dual-band antenna according to claim 22, further comprising the body section including at least one amplifier.
24. The dual-band antenna according to claim 15, further comprising the elements being adjustable in length.
25. The dual-band antenna according to claim 15, further comprising the at least two radiators being adjustable in length.